



DEPARTMENT OF THE AIR FORCE  
AIR FORCE AUDIT AGENCY

3 September 2003

HQ AFAA/DO  
1125 Air Force Pentagon  
Washington DC 20330-1125

Mr. Ryan Warner  
Host/Producer  
WYSO's Morning Edition  
WYSO Weekend

Dear Mr. Warner

On 2 September 2003, we received your 29 August 2003 Freedom of Information Act (FOIA) request, forwarded to us by the 88<sup>th</sup> Communications Group (88 CG/SCCM) FOIA Manager, for a copy of the 2002 audit report on the US Air Force Museum. Accordingly, attached is Report of Audit F2002-0017-DW0000, *Property Management, United States Air Force Museum*, Wright-Patterson AFB OH, 21 March 2002.

Please note the enclosed report describes deficiencies that existed before the issue date and discusses corrective actions taken or planned at the time of issuance. As a result, the report may not represent current conditions.

The search and duplication fees for responding to your request are waived. This completes our work on your request; therefore, I am closing your file in this office. Direct questions regarding this response to Mr. Jerry Kleeman, HQ AFAA/DOO, 703-696-8014.

Sincerely

  
MICHAEL V. BARBINO  
Assistant Deputy Auditor General

Attachment:  
Report of Audit F2002-0017-DW0000



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# **INSTALLATION REPORT OF AUDIT**

**F2002-0017-DW0000**

**Property Management  
United States Air Force Museum  
WRIGHT-PATTERSON AFB OH**

**Wright-Patterson Area Audit Office**

**21 March 2002**

**Property Management  
United States Air Force Museum  
WRIGHT-PATTERSON AFB OH**

**Synopsis**

**Project F2001-DW0000-0210.000<sup>1</sup>**

This locally initiated audit was requested by the Chief, Investigations Branch, Air Force Office of Special Investigations (AFOSI), Detachment 101, Wright-Patterson AFB. The audit reviewed and evaluated the effectiveness of historical property collection management systems and practices at the United States Air Force Museum (USAFM). The United States Air Force Museum System (USAFMS)<sup>2</sup> acquires, cares for, and manages all Air Force historical property. The USAFMS currently manages more than 74,000 historical artifacts, including over 2,600 aerospace vehicles. Approximately 43,000 of these artifacts, including over 300 aerospace vehicles, are located at the national museum at Wright-Patterson AFB. Personnel at the national museum also oversee a loan program for more than 400 aerospace vehicles. We completed audit fieldwork on 28 January 2002 and provided the draft report to management on 11 February 2002. Reference Appendix I for audit objectives, methodology, and disclosure.

USAFM personnel did not always effectively manage museum property. While Collections Division (MUC) personnel maintained adequate inventory records and adequately protected museum assets, they did not properly account for historical property. Specifically, MUC personnel did not adequately manage the disposal, or deaccession, of historical property. In addition, we reported audit results (cataloging artifacts and key control) not warranting inclusion in this report to the USAFM Director in a separate 21 March 2002 memorandum. **For details, please refer to the following Tab.**

We provided a copy of this report to the Chief, Investigations Branch, AFOSI, Detachment 101 and to the Director, United States Air Force Museum (USAFM/MU) and other interested officials. Management agreed with the audit results and recommendations. Corrective actions taken should correct the identified problems. Therefore, this report does not contain any issues requiring elevation for resolution.



JULIE A. SULLIVAN  
Wright-Patterson AFB Team Chief



JOHN T. BEDNAR  
Chief, Wright-Patterson Area Audit Office

<sup>1</sup> The previous project number was 01DW0036.

<sup>2</sup> The USAFMS consists of the national museum at Wright-Patterson AFB, Air Force field museums, Air Force historical holdings, and airparks.

## ACCOUNTABILITY

### Introduction

1. The USAFM is responsible for the care and management of the national historic collection of the Air Force. Within the USAFM, MUC personnel record newly acquired historical artifacts in an accession register within 24 hours of receipt. Within an accession, which may contain numerous individual artifacts, each item receives a unique catalog number and is processed within 30 days using Air Force (AF) Form 3582, USAFMS Accession Worksheet. After completing AF Form 3582, MUC personnel enter catalog information in the Air Force Museum Artifact Tracking System (AFMATS) database.
2. According to Air Force Instruction (AFI) 84-103, Museum System, the Director, USAFM approves all property actions, including disposals. Further, USAFM Operating Instruction (USAFMOI) 84-20, Disposition of USAFM Historical Material, 25 November 1996, states: "No donated items of historic property of any type (hardware, documentation, photographic, etc.) will be disposed of in any manner without first being reviewed by the division responsible for the items and approved for disposition by the Deaccession Committee." After Deaccession Committee<sup>3</sup> approval, the Director and Curator must both sign an Inventory Adjustment Voucher (IAV) prepared by Collections Division personnel. Artifact disposition then occurs in accordance with disposition approval instructions. Finally, IAV numbers and dates are recorded in the AFMATS, and original IAVs, along with all associated paperwork, are filed in both a deaccession log and appropriate accession files.
3. Management controls over historical property maintain proper accountability and minimize the potential for theft or misappropriation. Sound management controls include separation of duties. Specifically, key processes, such as authorization of transactions, recording of transactions, and custody of assets, should be performed by different departments or, at least, different individuals. Adequate separation of duties makes deliberate introduction of error more difficult because it would require collusion of two or more persons and increases the chances an innocent error will be found and flagged for correction.

### AUDIT RESULTS

4. MUC personnel did not adequately manage the disposal, or deaccession, of historical property. Specifically, required deaccession authorization and documentation did not support 122 of 123 IAVs reviewed,<sup>4</sup> as vouchers were signed by unauthorized personnel and/or lacked supporting documentation. In addition, IAVs for the deaccession of a communications specialist patch and 3 Russian-made 23MM guns recorded in the AFMATS could not be located.

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<sup>3</sup> The Deaccession Committee consists of the Director, Curator, and two employees each from the Collections Division (MUC) and Research Division (MUA).

<sup>4</sup> These 123 vouchers, executed between 25 May 1971 and 1 March 2001, covered deaccessions of 508 artifacts in our samples. We randomly selected one hundred twenty artifacts from the 12,198 artifacts (not including weapons) deaccessioned at the national museum. We also reviewed all 388 weapons deaccessions.

Specifically, AFMATS data and documents in the accession folder showed 3 Russian 23MM guns were deaccessioned; however, there was no IAV in the accession folder and the IAV number was not recorded in the AFMATS. Further, we could neither document nor verify the deaccession of 9 weapons not located during physical inventories we conducted on 17 May and 3 June 2001.<sup>5</sup> (See paragraph 5a below.)

This occurred because the Chief of Collections did not follow established guidance and procedures for the disposition of historical property. This situation went undetected because USAFM personnel had not established procedures for periodic internal reviews of deaccession transactions. In addition, key disposal process duties were not separated among divisions/individuals. Specifically, the Chief of Collections could unilaterally complete and authorize IAVs, complete transfer papers, package items for disposition, and record associated inventory adjustments in the AFMATS. Consequently, MUC personnel processed property for disposal and made inventory adjustments without proper approval. Periodic review of transactions and separation of duties gives the USAFMS assurance historical property is adequately protected from theft and misappropriation and remains available to exhibit the history and traditions of the United States Air Force.

**5. Audit Comments.**

a. Specific information regarding the 9 weapons referred to in paragraph 4 was omitted from this report at the request of Detachment 101, AFOSI, pending the outcome of their investigation.

b. USAFMOI 210-3, Disposition of USAFM Historical Material, 16 March 1987, established procedures requiring the Director and Curator sign and approve all IAVs.<sup>6</sup> In addition, all supporting documentation (disposition approval letter, exchange agreement, etc.) must be attached to and filed with each IAV. IAV Number 2001-1027 was completed after implementation of this policy, and was the only voucher in our sample of 123 to have the required deaccession authorization and supporting documentation. During fieldwork, we determined the AFMATS did not maintain a transaction history to identify changes made to its data records. Transaction histories run in the system's background and are not accessible to individual operators. This audit trail allows system personnel to reconstruct all changes made to database records and determine who made them. On 20 July 2001, USAMF/MU (Support) personnel activated a transaction history for AFMATS that tracks 79 different information categories. While the transaction history, by itself, will not correct the deficiencies cited in paragraph 4, it will act as a deterrent against fraud, theft, and other illegal acts.

**6. Recommendations.** The Director, USAFM should establish procedures to

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<sup>5</sup> Deaccession of these 9 weapons was not recorded in the AFMATS.

<sup>6</sup> In 1997, the current director reaffirmed and updated this instruction (USAFM OI 84-20), which we used as current criteria in our evaluation.

a. **Recommendation 1.** Periodically review deaccessions and supporting IAV transactions.

b. **Recommendation 2.** Separate key duties and responsibilities related to the disposal process.

7. **Management Comments.** The Director, USAFM, concurred with the audit results and recommendations, and stated:

a. **Recommendation 1.** “Disinterested parties will, on a quarterly basis, review deaccessions and supporting Inventory Adjustment Voucher (IAV) transactions for adherence to U.S. Air Force Museum policy. Findings will be reported to the Director, Curator and Chief of the Collections Division, United States Air Force Museum. The reviewing process will include verification of final disposition of deaccessioned artifacts. The first review was accomplished on 22 February 2002 by a member of the AFMC History Office staff. Findings of the review were presented to the Curator and Director and are on file in the Curator’s office. **(CLOSED)**”

b. **Recommendation 2.** “Key duties and responsibilities have been separated in the deaccessioning process. Within the Collections Division, the Registrar generates deaccession documents for items located at USAFM and released through the exchange process, while the Loan Administrator and Loan Program Assistant produce deaccession documentation for items on loan from USAFM to Air Force and civilian museums. The Static Display Program Administrator in the Plans and Programs Office creates deaccession documentation for the Static Display Program. Every deaccession is coordinated through the Conservator and the Chief, Collections Division, as well as the Archivist and the Chief, Research Division. The Curator and the Director sign as the certifying and approving officials on the IAV. The documentation will be reviewed quarterly by disinterested parties to verify final disposition. **(CLOSED)**”

8. **Evaluation of Management Comments.** Management comments addressed the issues raised in the audit results, and management actions taken should correct the problem.

**AUDIT OBJECTIVES, METHODOLOGY, AND DISCLOSURE**

1. **Audit Objectives.** Our overall objective was to determine whether United States Air Force Museum personnel effectively managed museum property. Specifically, we determined whether

- a. personnel properly accounted for historical property;
- b. personnel maintained adequate inventory records; and
- c. museum assets were adequately protected.

2. **Criteria.** Criteria used to conduct this audit included:

- a. AFI 51-601, Gifts to the Department of the Air Force, 15 November 1999.
- b. AFI 84-103, Museum System, 25 February 1998.
- c. USAFMOI 84-20, Disposition of USAFM Historical Material, 25 November 1996.
- d. USAFMOI 84-27, USAFM Exchange Program, 20 June 1997.
- e. United States Air Force Static Display Program, Loan Agreement with Attachments, May 2001.

3. **Extent of Coverage.** To accomplish the audit objectives, we performed audit tests, evaluated management controls, assessed computer-generated data reliability, and applied government auditing standards.

a. **Audit Tests.**

(1) To determine whether museum personnel properly accounted for historical property, we selected a random sample of 60 items from 41,650 artifacts accessioned at the national museum. We further divided the sample into 30 artifacts accessioned prior to 1 January 1997 and 30 artifacts accessioned on or after 1 January 1997.<sup>7</sup> On 5 June 2001, we conducted a physical inventory of these artifacts to verify they existed and ensure they were located in areas indicated in the AFMATS database. We also verified the existence of archive materials listed in a systematically selected<sup>8</sup> sample of 25 accession folders from 4,200 folders maintained in the Research Division.

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<sup>7</sup> The former national museum director retired on 30 November 1996 and a new director was hired on 1 December. Other upper-level management positions also turned over during this period. Therefore, we stratified the sample to allow for any changes in procedures.

<sup>8</sup> Skip-interval sampling methodology was used to select 15 accessions from 4,200 accessions in the Archive database. Every 280th record was selected using 157 as a random starting point. We used a random number generator to select 10 accessions from 908 recorded since 1 January 1997.

In addition, we selected a random sample of 120 items from 12,198 artifacts (excluding weapons) deaccessioned from the overall museum collection. Due to the additional risk associated with firearms, we selected all 388 weapons deaccession for testing. We also participated in the physical inventory of 266 weapons located in the gun vault in Hanger 4. Finally, we evaluated documentation supporting 508 deaccessioned artifacts in our samples (388 weapons and 120 other artifacts).

(2) To determine whether museum personnel maintained adequate inventory records, we reviewed 253 accession/loan folders and documented their contents. We examined documents for authenticity, unusual markings, and alterations. We randomly selected 25 artifacts from various museum areas and traced them back to the AFMATS database. We also judgmentally selected 15 aerospace vehicles from 410 on static display at various locations throughout the United States to verify and compare the location, tail number, and condition of each vehicle to information maintained in the USAFM Programs Office.

(3) To determine whether museum assets were adequately protected, we documented reliability testing results using the AFMATS database and examined how unauthorized access was prevented. We documented security measures for each building occupied by the museum, noted any special equipment in use (surveillance cameras, intrusion alarms, motion detectors, etc.), and determined how many people from the various divisions had access to each museum building. Finally, we documented how many radio keys to the gate between the main museum and Area B, Wright-Patterson AFB, were in circulation.

b. **Management Controls.** We evaluated management controls related to adequate separation of duties, proper procedures for authorizing and recording transactions, safeguarding assets and/or records, independent checks of performance, adequate documentation of transactions (support for/retention of), and proper execution of transactions.

c. **Computer-Generated Data.** We relied on computer-generated data contained in the AFMATS. To establish data reliability, we compared output data from numerous queries to manual documents contained in accession folders and loan files to validate data accuracy; reviewed output products for obvious errors, reasonableness, and completeness. Based on these tests, we concluded data were reliable to meet audit objectives.

d. **Audit Standards.** We conducted this audit in accordance with generally accepted government auditing standards and reviewed documentation dated 18 January 1949 through 27 September 2001.

4. **Prior Audit Coverage.** Review of Air Force Audit Agency (AFAA), Department of Defense Inspector General, U.S. General Accounting Office, and public accountant audit reports issued to the USAFM within the last 5 years disclosed one AFAA report covering similar issues addressed in this report. Specifically, in Report of Audit 44596050, Management of the United States Air Force Museum System, 5 June 1996, auditors determined museum personnel did not adequately manage the acquisition, registration, and documentation of weapons; establish accountability of historical property within 24 hours of receipt; and have required Designated Approval Authority (DAA) certification for the museum inventory system. The USAFM

Director (USAFM/MU) directed Collections Division management to identify the types and quantities of weapons needed to support museum operations; review continuing requirements for weapons as part of the required semiannual weapons inventory; report newly acquired small arms to the Air Force Small Arms Registry; reconcile on-hand weapons with the Air Force Registry as a part of the inventory process; and catalog and document components removed from display weapons in accession folders. During the current audit, we determined museum personnel were establishing accountability of artifacts within 24 hours of delivery to the Collections Division. We also determined the requirement for registering small arms with the Air Force Small Arms Registry no longer exists. Finally, we determined the AFMATS database did receive DAA certification.

5. **Discussion with Responsible Officials.** We discussed this report with the Chief, Investigations Branch, AFOSI, Detachment 101, Wright-Patterson AFB on 3 December 2001. We also discussed this report with the Director, USAFM/MU and other interested officials on 11 February 2002. We received management's formal comments on 5 March 2002 and included them in this report.

6. **Freedom of Information Act.** The disclosure/denial authority prescribed in Air Force Policy Directive 65-3 will make all decisions relative to the release of this report to the public.

**REPORT POINTS OF CONTACT AND DISTRIBUTION**

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